estimates were based on results of clinical studies and on information from the list of medical and economic charges of Republic of Kazakhstan (2009 y) and the retail price of pharmacies in Karaganda. Data sources: PubMed, the Cochrane library, Internet search was performed to analyze the results of clinical studies of treatment patients with breast cancer. **RESULTS:** One-year survival rate was higher by 21.8% in patients receiving chemotherapy with "Arglabin" compared with patients receiving chemotherapy alone. Indicator "cost-effectiveness" for the scheme with Arglabin was 281,8 (the cost of one course of treatment is 281,8 $ on one survivor patient). Indicator "cost-effectiveness" for the standard scheme CMF was 367,5 (the cost of one course of treatment is 367,5$ on one survivor patient). **CONCLUSIONS:** The study was identified efficiency and economic benefit of therapy with "Arglabin". Arglabin is effective and safety as additional agent to standard treatment and the implementation of this drug to standard therapy of breast cancer will improve the outcomes and reduce the costs.

PCN11
TREATMENT COSTS FOR BREAST CANCER IN JAPAN: LARGE CLAIM DATABASE ANALYSIS

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OBJECTIVES: Number of expensive anti-cancer drugs is increasing. It is important to assess cost-effectiveness of such high-cost drugs, however cost data, which is applicable to economic evaluation, are not accumulated enough in Japan. Therefore we analyzed large claim database to obtain treatment costs for breast cancer. **METHODS:** We used JMDC (Japan Medical Data Center) claims database, in which claim data of approximately 1.5 million insured people are collected from January 2005 to September 2013. We analyzed treatment costs of (a) adjuvant chemotherapy, (b) hormone therapy and (c) chemotherapy for metastasis. Breast cancer was defined by disease name including claim date (C50 of ICD-10). Since no ICD-10 code directly indicates metastatic breast cancer, combination of codes such as C780 (metastasis to lung), C787 (to liver) and C793 (to brain) was used to extract metastatic patients. We calculated monthly average costs and total costs for treatment period. **RESULTS:** Approximately 400 patients receiving adjuvant chemotherapy were identified. Use of taxane (+ JPY 450,000 [USD 4,500, USD1 = JPY100])), trastuzumab (+ JPY 2.2 million [USD 22,000]) and hormone therapy (+ JPY 300,000 [USD 3,000]) significantly influenced on the treatment costs per patient. Most frequently administered regimens were DC (D: Docetaxel, C: Cyclophosphamide), FEC+D (F: 5-FU, E: Epirubicine) EC+D, and FEC. Costs of hormone therapy for metastatic breast cancer was averagely about JPY 110,000 [USD 1,100] per month. Tamoxifen was most widely used drug, followed by letrozole, anastorozole and exermestan. Average costs of chemotherapy was JPY 180,000 [USD 1,800] per month for patients without receiving molecular targeting therapy. It increased to JPY 360,000 [USD 3,600] per month if molecular targeting drugs were used. **CONCLUSIONS:** We can estimate treatment costs of breast cancer from the large Japanese claim database. These data are useful when cost-effectiveness analysis is performed.

PCN12
ANNUAL HEALTH INSURANCE COST OF BREAST CANCER TREATMENT IN HUNGARY

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OBJECTIVES: Organised, nationwide screening for breast cancer with mammography in the age group 45-65 years with 2 years screening interval started in Hungary in January 2002. The aim of this study is to analyze the health insurance expenditures of breast cancer treatment. **METHODS:** The data derive from the financial database of the National Health Insurance Fund Administration (NHIFA) covering the 2010 year. The analysis of health insurance costs included outpatient costs of mammography screening, hospital costs of breast surgery, the cost of kemo- and radiotherapy. **RESULTS:** The total annual health insurance cost of the National Health Insurance Fund Administration is estimated 12.09 billion Hungarian Forint (HUF) or 58.09 million dollar (USD). Most of them (61.0 %) releted to the cost of chemotherapy (7.38 billion HUF or 35.46 million USD). The next largest cost item (20.9 %) is the cost of radiotherapy (2.53 billion HUF or 12.16 million USD). Surgical treatment (1.14 billion HUF or 5.47 million USD) of breast cancer and cost of mammography screening (1.04 billion HUF or 5.00 million USD) represents both similar volume (9.4 and 8.6 % respectively). **CONCLUSIONS:** The costs related to breast cancer screening and treatment showed an increasing trend in the past years. The most important cost item is the cost of chemotherapy.

PCN13
ANALYSING THE EFFECTS OF A DISINVESTMENT DECISION IN BREAST CANCER SCREENING PROGRAMMES IN ASIA-PACIFIC COUNTRIES: A MODELLING APPROACH

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OBJECTIVES: Disinvestment decisions are made when existing health technologies do not fulfil criteria such as efficacy, effectiveness or safety. Breast cancer screening (BCS) using mammography is widely implemented; yet many studies show that a significant percentage of women are overdiagnosed and overtreated. The objective of this study is to analyse the effects of a BCS disinvestment decision in Asia-Pacific countries, and to explain any differences between countries. **METHODS:** A mathematical model was developed to analyse population outcomes and costs associated with breast cancer (BC) from 2014 to 2050 in Australia and Korea. Population outcomes were measured as number of women diagnosed with BC, number of women overdiagnosed and number of deaths associated with BC. The model allowed the analysis of these outcomes with and without a BCS programme in place, as a proxy to evaluate the effects of disinvestment. **RESULTS:** Results varied between countries, particularly depending on ethnicity and level of participation in the BCS programme. The model predicted a significant increase in the number of deaths associated with BC in Korea; a disinvestment decision, however, would not have a large impact on the number of deaths, due to currently high levels of overdiagnosis, and overall costs would be significantly reduced. A disinvestment decision in Australia would dramatically reduce the number of overdiagnosed women, although mortality due to BC would be higher. **CONCLUSIONS:** This analysis has shown that the cost-effectiveness of BCS programmes should be evaluated over the long-term in order to take into account the consequence of overdiagnosis. Disinvestment decisions are complex and must be made locally, taking into consideration specific characteristics of the population under study.

PCN16
COST-EFFECTIVENESS ANALYSIS OF 1-YEAR ADJUVANT TRASTUZUMAB THERAPY OF EARLY-STAGE HER2-POSITIVE BREAST CANCER

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OBJECTIVES: Trastuzumab, a monoclonal antibody, has been widely used in treatment of HER2-positive breast cancer because of its proved effectiveness and safety. However because of the high price, the cost-effectiveness of trastuzumab should be evaluated especially in such low-income country as Vietnam. This is also the aim of this study. **METHODS:** A Markov model has been constructed with 5 health states (disease-free survival, local recurrence, regional recurrence, metastatic, death) with 1-year cycle length and lifetime horizon. The transition rates between states have been retrieved from relevant epidemiological studies, clinical trials and experts' opinions. A population of 1000 50-year-old women with average weight of 60 kg has been included in model. Lists of medical services and drugs were derived from NCCN guideline 2014. The prices of drugs and medical services have been averaged from the price-lists in 2013 of some major hospitals in Vietnam. Both QALYs and cost were discounted at 3%. Probabilistic sensitivity analysis was also conducted. **RESULTS:** 1-year trastuzumab adjuvant therapy of HER2-positive early-stage breast cancer costed VND 936,459,291.67 for life-time horizon and resulted in 10.07 QALYs. Standard chemotherapy costed VND 227,092,425 and resulted in 7.32 QALYs. Therefore 1-year trastuzumab adjuvant therapy costed an addition amount of VND 709,4 million and resulted in added QALY of 2,75 years. CER of trastuzumab group is 3 times higher than no trastuzumab group (VND 91 million vs 30 million, respectively). The incremental cost-effectiveness ratio (ICER) resulted in VND 265,115,616.93. One-year trastuzumab adjuvant therapy has been considered to be cost-effective when comparing with willing-to-pay (WTP) of Vietnam (VND 253,503,360.00). Sensitivity analysis showed that the most affecting factor on the cost-effectiveness of trastuzumab is its price. **CONCLUSIONS:** 1-year trastuzumab adjuvant therapy of HER2-positive early-stage breast cancer is cost-effectiveness in Vietnam. Trastuzumab's price is the most affecting factor on its cost-effectiveness.

PCN17
COST EFFECTIVENESS ANALYSIS OF ANTIDEPRESSANTS ON BREAST CANCER PATIENTS: A MARKOV MODELING STUDY

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OBJECTIVES: With the developing of new technology for genetic test, the accuracy of predicting the risk that a patient may diagnose with breast cancer in future was increased dramatically. But considering that after diagnosis with breast cancer, those women has doubled prevalence of diagnosed with depression compared with general female population, and the anxiety patient suffered after realized taking specific mutations, which high likely led to breast cancer, before really diagnosed with breast cancer. There is no doubt that depression is a serious issue for patient with high risk of developed breast cancer. Moreover, the drug interaction between antidepressants and tamoxifen reduces the effect of tamoxifen, and complicates the decision-making. This cost-effectiveness study tries to use Markov model to investigate the best strategy that gives to high-risk breast cancer patients after genetic test and diagnosed with breast cancer. **METHODS:** A cost-effectiveness study using Markov model will be conducted from a third payer perspective. Both time and different antidepressants from desipramine, fluoxetine, paroxetine, mianserin, melatonin to escitalopram will be included in this study as different exposure. Life-long quality of life will be calculated as outcome. In order to investigate the extent of accuracy, one way sensitivity analyses and probabilistic sensitivity analysis will be conducted. **RESULTS:** Mianserin, melatonin does not interfere with tamoxifen treatment, under that situation, these medication have the best outcome. The time period from diagnosed with breast cancer till 1 year is the best timing to give antidepressants, which may significantly change the outcome. **CONCLUSIONS:** Even though, sometimes patients with breast cancer may not realize they already threaten by depression, the antidepressant still significantly important to breast cancer population to prevent the progression of depression with better outcome.

PCN18
COST-EFFECTIVENESS OF PARA-AORTIC LYMPHADENECTOMY BEFORE CHEMORADIOTHERAPY IN LOCALLY ADVANCED CERVICAL CANCER

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OBJECTIVES: To evaluate the cost-effectiveness of nodal staging surgery before chemoradiotherapy (CRT) for locally advanced cervical cancer (LACC) in the era of PET/CT. **METHODS:** A modified Markov model was constructed to evaluate cost effectiveness of para-aortic staging surgery before definite CRT when no uptake is recorded in para-aortic lymph nodes (PALN) on PET-CT. Survival and rates of complications were estimated based on the published literatures. Cost data was obtained from Korean National Health Insurance database. Strategies were compared using an incremental cost-effectiveness ratio (ICER). Sensitivity analyses were performed including an estimate for performance of PET/CT, postoperative complication rate,